

NOTE TO PTO PERSONNEL:

**THIS PATENT APPLICATION IS BEING
FILED WITH SMALL ENTITY STATUS**

HANGING CARD MECHANISM FOR A SOCKET

FIELD OF THE INVENTION

The present invention relates to a hanging card mechanism for a socket, and more particularly to a hanging card mechanism having 5 two steps of the function of guarding against thief and an easier combination.

BACKGROUND OF THE INVENTION

Recently, a conventional hanging card, and particularly a hanging card for a socket, which is generally used on the market, only has 10 basic function with hanging or decoration and has no the function which avoids stealing. Thus, when the hanging card and the socket are demonstrated, the socket could be pulled out and stolen by thief. For above reason, another hanging card is designed to have the function which avoids stealing. Although the mechanism of the 15 hanging card has the function which can avoid stealing, there are the following disadvantages in an embodiment of the hanging card:

1. When the hanging card is joined with the socket, the hanging card must be align to the socket and further exactly joined with the socket so as to cause a user to be troublesome and inconvenient.
2. The movement of the hanging card corresponding to the socket is not smooth, and often the hanging card is incompletely snapped into the socket so as to cause the hanging card not to avoid stealing.
3. There is only one step of function of guarding against thief.

When the hanging card is cut, the hanging card is only discarded

and not recovered against, so as to cause the problem of environmental protection and waste the nature resource.

Accordingly, there exists a need for a hanging card mechanism for a socket to solve the above-mentioned disadvantages.

5 **SUMMARY OF THE INVENTION**

It is an object of the present invention to provide a hanging card mechanism having two steps of the function of guarding against thief and an easier combination and improving disadvantages of the conventional hanging card.

10 In order to achieve the foregoing objects, the present invention provides a hanging card mechanism for a socket. The socket is joined with the hanging card mechanism. The hanging card mechanism has two steps of the function of guarding against thief and includes a card body and a base. The card body includes a card having a bottom, a driving head expanding from the bottom of the card, and an inclined conical portion connected to the driving head.

15 The base is circular and groove-shaped and includes a bottom, two snapping pieces disposed at the bottom and being symmetrical to each other, an inner bottom surface, and a groove disposed the inner bottom surface, such that the inclined conical portion of the driving head is inserted into and joined with the groove.

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The foregoing, as well as additional objects, features and advantages of the invention will be more readily apparent from the following detailed description, which proceeds with reference to the

accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective exploded schematic view of a hanging card mechanism for a socket according to an embodiment of the 5 present invention.

FIG. 2 is a perspective exploded and partial sectional schematic view of a hanging card mechanism according to the present invention.

FIG. 3 is a perspective exploded schematic view of a hanging 10 card mechanism according to the present invention.

FIG. 4 is a perspective schematic view of a hanging card mechanism according to the present invention.

FIG. 5 is a bottom plan schematic view of a hanging card mechanism for a socket showing an embodiment of the present 15 invention.

FIG. 6 is a bottom plan schematic view of a hanging card mechanism for a socket showing an embodiment of the present invention.

20 DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to FIGS. 1 to 6, they depict a hanging card mechanism 10 for a socket 50 according to the present invention, wherein the hanging card mechanism 10 has two steps of function of guarding

against thief and the bottom of the hanging card mechanism 10 is connected to the socket 50. The present invention is characterized as follows:

The hanging card mechanism 10 includes a card body 20 and a base 30. The card body 20 includes a card 21, a driving head 25 which is expanding from the bottom of the card 21, and an inclined conical portion 22 which is connected to the driving head 25. The base 30 is circular and groove-shaped and includes two snapping pieces 31 which are disposed at the bottom thereof and symmetrical to each other. The base 30 is provided with a groove 32 which is disposed the inner bottom surface thereof, such that the inclined conical portion 22 of the driving head 25 is inserted into and joined with the groove 32.

Furthermore, the driving head 25 is provided with at least one setting piece 26 which is deposited at two sides thereof, and the base 30 provided with at least one hole 33 which is corresponding to the setting piece 26, such that the setting piece 26 is snapped into and joined with the hole 33.

In addition, the snapping piece 31 of the base 30 is provided with at least one flange 34 so as to be snapped into and joined with the groove (not shown) which is disposed in the socket 50.

Furthermore, the base 30 is provided with a block 25 which is disposed beside the groove 32, and the driving head 25 is provided with a half arc groove 27 which is disposed in the bottom thereof, such that the block 25 and the half arc groove 27 are interactive to

drive the hanging card mechanism 10 to be opened or closed.

Referring to FIGS. 1 to 6 again, they depict the combination of the hanging card mechanism 10 for the socket 50 according to an embodiment of the present invention. As the inclined conical portion 22 is inserted into the base 30, the setting piece 26 of the driving head 25 will be snapped into and jointed with the base 30 so as to have a first step of the function of guarding against thief. Furthermore, after the inclined conical portion 22 is inserted into the groove 32 of the base 30, the snapping piece 31 provided with the flange 34 will be pushed outward and then the flange 34 will be snapped into a groove (not shown) which is disposed in the interior of the socket 50 and corresponding to the flange 34, so as to have a second step of the function of guarding against thief and be not pulled out by external force. Then, the combination of the hanging card mechanism 10 and the socket 50 are completed.

As described above, the hanging card mechanism 10 according to the present invention has two steps of the function of guarding against thief. When the socket 50 is requested to be separated from the hanging card mechanism 10, an A portion of the base 30 will be cut firstly. After the A portion is cut, the block 35 will be corresponding to the half arc groove 27 to be rotated so as to drive the inclined conical portion 22. When the inclined conical portion 22 is rotated to 90 degrees, the inclined conical portion 22 does not push the snapping piece 31 and the flange 34 is reset to original position. Simultaneously, the flange 34 is not snapped into the

groove of the socket 50, such that the socket 50 will be separated from the snapping piece 31 of the base 30 and pulled out to be used. The base 30 and the socket 50 are closed, as shown in FIG. 5, and the base 30 and the socket 50 are opened, as shown in FIG. 6.

5 Furthermore, the advantage of the present invention is that the hanging card mechanism 10 does not need to be discarded after the socket 50 is separated from the hanging card mechanism 10. Thus, the hanging card mechanism 10 differs from the conventional hanging card. Although the function of guarding against thief 10 disappear when the A portion of the base 30 is cut, the hanging card mechanism 10 can be still used because the main structure of the hanging card mechanism 10 is not broken yet. The hanging card mechanism 10 can be still joined with the socket 50 and hanged by using the hanging card 21, so the present invention solves the 15 problem of environmental protection and economizes the nature resource.

In addition, as compared with the conventional hanging card, the hanging card mechanism according to the present invention has not only two steps of the function of guarding against thief but also an 20 easier combination and an operation with less force. The shape of the hanging card mechanism is graceful, the structure of the hanging card mechanism is firm, and the hanging card mechanism can be recovered and used again to avoid buying a new one, such that a consumer can decrease the cost of the hanging card.

25 As a whole, the hanging card mechanism according to the present

invention improves the driving method of the conventional hanging card and therefore the present invention has utility, the function of guarding against thief and non-obviousness.

Although the invention has been explained in relation to its 5 preferred embodiment, it is not used to limit the invention. It is to be understood that many other possible modifications and variations can be made by those skilled in the art without departing from the spirit and scope of the invention as hereinafter claimed.